

**WHAT IS CLAIMED IS:**

1. An Express Card interface adapter suitable for a small storage medium, comprising a casing configured to comply with the Express Card standard, wherein the small storage medium is a Compact Flash (CF) standard storage medium, the Express  
5 Card interface adapter being characterized in that:

a front end of the casing includes a double-configuration interface coupled with a system;

a rear end of the casing includes a U-shaped slot, wherein two sides of the U-shaped slot form guide tracks, a third side of the U-shaped slot has a CF standard  
10 interface, thereby the CF standard storage medium is placed in position by insertion along the guide tracks to connect to the CF standard interface;

a circuit board coupled between the double-configuration interface and the CF standard interface;

an IDE converter control chip connected on the circuit board and respectively  
15 coupled with the double-configuration interface and the CF standard interface, wherein the IDE converter control chip operates a signal controller between the CF standard storage medium and an external system;

wherein the CF standard interface at least includes a CF card detect pin;

wherein the IDE converter control chip at least has a set of system data  
20 transmission pins; and

wherein the double-configuration interface includes:

a card insertion detect pin coupled with the CF card detect pin to determine whether the CF standard storage medium is inserted;

a set of differential serial pins coupled with the system data transmission pins to conduct signal transmission with the external system.

2. The Express Card interface adapter of claim 1, wherein the CF standard  
5 storage medium includes a removable CF memory card and a micro drive.

3. The Express Card interface adapter of claim 1, wherein the CF standard storage medium includes a fixed small hard disk.

10 4. The Express Card interface adapter of claim 1, wherein the double-configuration interface includes a PCI Express interface and a USB interface.

5. The Express Card interface adapter of claim 4, wherein the PCI Express interface is used as an operating interface.

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6. The Express Card interface adapter of claim 4, wherein the USB interface is used as an operating interface.

7. The Express Card interface adapter of claim 1, wherein the double-  
20 configuration interface includes a power terminal that transmits an operating voltage issued from the system under an enable status of the card insertion detect pin.

8. The Express Card interface adapter of claim 1, wherein the CF standard interface further includes a plurality of address pins, data transmission pins and control pins.

5 9. The Express Card interface adapter of claim 1, wherein the IDE converter control chip includes a plurality of address pins, data transmission pins and control pins respectively corresponding to those of the CF standard interface.

10 10. An Express Card interface adapter suitable for a small storage medium, comprising a casing configured to comply with the Express Card standard, the interface adapter being characterized in that:

a front end of the casing includes a double-configuration interface coupled with a system;

15 a rear end of the casing forms a slot to accommodate the insertion of a small memory card;

an inside of the casing corresponding to the slot includes a signal converter configured to accommodate the small memory card and conduct signal transmission via the double-configuration interface to the system;

20 a circuit board coupled between the double-configuration interface and the signal converter;

a multi-card reader control chip assembled on the circuit board and respectively coupled with the double-configuration interface and the signal converter, wherein the multi-reader control chip operates as a signal controller between the system and the small memory card;

wherein the double-configuration interface at least includes:

a set of differential serial pins configured to conduct signal transmission with the system; and

a card insertion pin configured to determine whether the memory card is inserted;

wherein the multi-card reader control chip includes:

a set of system data transmission pins coupled with the differential serial pins; and

a first detect pin, a second detect pin, a third detect pin respectively for detecting the insertion of the memory card;

wherein the signal converter includes:

a first type card detect pin coupled with the card insertion detect pin and the first detect pin, wherein the first type card detect pin detects the insertion of a first type of memory card;

a second type card detect pin coupled with the card insertion detect pin and the second detect pin, wherein the second type card detect pin detects the insertion of a second type of memory card;

a third type card detect pin coupled with the card insertion detect pin and the third detect pin, wherein the third type card detect pin detects the insertion of a third type of memory card.

11. The Express Card interface adapter of claim 10, the first type of memory card includes a SM or xD small memory card.

12. The Express Card interface adapter of claim 10, wherein the second type of memory card includes a MS small memory card.

13. The Express Card interface adapter of claim 10, wherein the third type of  
5 memory card includes a SD or MMC small memory card.

14. The Express Card interface adapter of claim 10 wherein the double-configuration interface further includes a PCI Express interface and a USB interface.

10 15. The Express Card interface adapter of claim 14, wherein the PCI Express interface is used as an operating interface.

16. The Express Card interface adapter of claim 14, wherein the USB interface is used as an operating interface.

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17. The Express Card interface adapter of claim 10, wherein the double-configuration interface includes a power terminal that transmits an operating voltage issued from the system under an enable status of the card insertion detect pin.

20 18. The Express Card interface adapter of claim 10, wherein the signal converter includes three sets of system data transmission pins and control pins respectively corresponding to the three types of memory card.

19. The Express Card interface adapter of claim 18, wherein the multi-card reader control chip includes a plurality of data transmission pins and control pins corresponding to the signal converter.